

**To:** Vandenberg, John[Vandenberg.John@epa.gov]; Sayles, Gregory[Sayles.Gregory@epa.gov]; Cogliano, Vincent[cogliano.vincent@epa.gov]  
**Cc:** Sams, Reeder[Sams.Reeder@epa.gov]; Walsh, Debra[Walsh.Debra@epa.gov]  
**From:** Jarabek, Annie  
**Sent:** Sun 1/26/2014 3:46:02 AM  
**Subject:** Re: Toxicology Information to support evaluation of PPh Basic

Hi Greg

I also worked on the glycol ethers awhile back & happy to help.

Annie

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From: Vandenberg, John  
Sent: Saturday, January 25, 2014 5:11:22 PM  
To: Sayles, Gregory; Cogliano, Vincent  
Cc: Sams, Reeder; Jarabek, Annie; Walsh, Debra  
Subject: Re: Toxicology Information to support evaluation of PPh Basic

Greg - I'm traveling now on vacation and won't be able to help with this. In fact, I'm turning off my blackberry so I don't have to think about it!

Vince - Jeff Gift has worked on glycol ethers so he may be able to help in a pinch. It looks from the email text that they are making a case for read-across among the chems, though I haven't opened the attachments. Might need to tap into others in NCEA.

Also, FYI, Gov Rockefeller has asked CDC and EPA to conduct a long term health study.

Good luck!  
John

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From: Sayles, Gregory  
Sent: Saturday, January 25, 2014 4:52:19 PM  
To: Cogliano, Vincent  
Cc: Vandenberg, John; Kavlock, Robert; Sams, Reeder; Jarabek, Annie; Clark, Becki  
Subject: Fw: Toxicology Information to support evaluation of PPh Basic

Vince - please see Becki's note and please review the attached materials NIEHS sent so we can be prepared to help out. I hope you have time to do this on the weekend - please advise. If you have any immediate thoughts to share, please do.

Thanks much.  
Greg

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From: Clark, Becki  
Sent: Saturday, January 25, 2014 4:23:07 PM  
To: Burneson, Eric; Doyle, Elizabeth; Grevatt, Peter  
Cc: Sayles, Gregory; Capacasa, Jon; Vandenberg, John; Cogliano, Vincent  
Subject: Fw: Toxicology Information to support evaluation of PPh Basic

Everyone,  
I am forwarding you data on the toxicity of the glycol ethers that were released during the West Virginia spill. NIEHS received this info from Dow Chemical, and they are working with CDC to evaluate it now. I expect ATSDR may make a statement and/or issue an updated health advisory after the new information has been evaluated.

It's a lot of information, but I think OW, ORD and R3 folks will need to look at it this weekend so we know what's there and can be ready to assist and review any updated health advisory. Please share with others in your organizations as appropriate, and let me know your thoughts on this. Thanks.

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From: Weis, Christopher (NIH/NIEHS) [E] <christopher.weis@nih.gov>  
Sent: Saturday, January 25, 2014 3:56:30 PM  
To: Clark, Becki; Sayles, Gregory  
Subject: FW: Toxicology Information to support evaluation of PPh Basic

Becki,

As discussed, attached is information from Dow regarding glycol ethers.

Chris

Christopher P Weis, Ph.D., DABT.  
Toxicology Liaison / Senior Advisor  
Office of the Director  
National Institute of Environmental Health Science  
National Institutes of Health  
Bethesda, MD  
Tel: 301.496.3511

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From: [REDACTED] **Ex. 4 - CBI**  
Sent: Saturday, January 25, 2014 12:39 PM  
To: Weis, Christopher (NIH/NIEHS) [E]  
Cc: Deford, Connie (CL); Kay, Michael (MT)  
Subject: Toxicology Information to support evaluation of PPh Basic

Hi Dr. Weis,

Dow is providing the following toxicological information to help assist in the risk characterization of PPh Basic in reference to the ongoing situation in West Virginia. I hope that it will provide you with the added background information and further detail you need to complete your assessment.

The first document is the ECETOC Report on Glycol Ethers. It is a very comprehensive review of data on the family of glycols ethers and how structural similarities of the two categories (the ethylene and propylene series) impart similar toxicity profiles. It is a good "go to" reference to help understand the rationale for using data from specific members in the category as read across to others.

The second document is a more detailed scientific rationale for using a category approach for the propylene glycol ethers series. The third document outlines the scientific justification for reading across from the ethylene glycol phenyl ether to the di-ethylene glycol phenyl ether, for the repeated-dose and developmental endpoints specifically.

Together the above reference materials, I hope, will provide you with a good foundation to better understand the structural similarity of the glycol ether class, its influence on the overall toxicity profiles and its application in using propylene glycol phenyl ether data to predict the toxicological profile for the di-propylene glycol phenyl ether.

Finally is a copy of the Chemical Safety Report (CSR) for propylene glycol phenyl ether (PPh) created in compliance with the requirements under the EU REACH registration. The report contains supported uses, the key toxicological studies, the critical NOAEL, DNELs and output from relevant exposure scenarios that were modeled for supported product uses.

I hope that the above information provides the level of detail needed to help advance your efforts. Please

feel free to contact me with any questions or for any additional information that you require.

Best regards,

**Ex. 4 - CBI**